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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,535	02/02/2005	Yasuhiro Saito	YAN-39	7548
20311	7590	09/09/2005	EXAMINER	
LUCAS & MERCANTI, LLP 475 PARK AVENUE SOUTH 15TH FLOOR NEW YORK, NY 10016			CINTINS, IVARS C	
			ART UNIT	PAPER NUMBER
			1724	

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/523,535

Applicant(s)

SAITO, YASUHIRO

Examiner

Ivars C. Cintins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/15/2005.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

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The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. The term "the filter bed comprises two vertically separated filter beds" (claim 1, line 12) is vague, and indefinite as to the limitation intended because it is not clear that a filter bed (see claim 1, line 2) can comprise a plurality of filter beds. Also, the term "bed" appears to be somewhat misdescriptive in defining a perforated filter plate or screen, since this term is normally used to represent a mass of loose particulate media in the filtration art. Claims 2-6 depend from indefinite claim 1, and are therefore also indefinite. Claim 5 is further indefinite because it is not clear what structure is represented by the term "portions" (lines 3 and 6).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/83076 in view of Japanese Utility Patent No. 59-158413 or Boze (U.S. Patent No. 3,623,978). WO 01/83076 discloses a filtration device having a cleansing mechanism of the type recited (see Fig. 2); and therefore, this primary reference discloses the claimed invention with the exception of the second filtration media layer positioned between two "filter beds." Each of the secondary references discloses a similar liquid filtration system, and teaches utilizing a plurality of diverse filtration media positioned between perforated plates and/or screens (i.e. "filter beds"). It would

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have been obvious to one of ordinary skill in the art at the time the invention was made to provide the filtration system of WO 01/83076 with an additional layer of filtration media of the type recited, as suggested by Japanese Utility Patent No. 59-158413 or Boze, in order to provide increased filtration capability for this primary reference system. Applicant should note that operation of motor **23a** to rotate screw conveyor **23** in the primary reference system will inherently cause some vibration in this system; and therefore, this motor is deemed to be patentably indistinguishable from the broadly recited "vibration generating device" of claim 6.

Claim 5 would be allowed if rewritten in independent form to include all of the limitations of parent claim 1, and if further amended to overcome the above rejection under 35 U.S.C. § 112, because the references of record do not teach or fairly suggest a filtration device of the type recited including liquid sprayers for spraying the second filtration media located between the two "filter beds" from the exterior, which liquid sprayers are located on the outer wall of the filtration tank, such that cleansing fluid is sprayed toward the layer of second filtration media by the sprayers to separate contaminants attached to the second filtration media by the stream of cleansing fluid.

Hjelmner et al. (U.S. Patent No. 4,126,546), Werfelman (U.S. Patent No. 4,260,426), Hensley (U.S. Patent No. 4,787,987) and Hering (U.S. Patent No. 4,891,142) disclose conventional liquid filtration systems.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is 571-272-1155. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If

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attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Duane Smith, can be reached at 571-272-1166.

The centralized facsimile number for the USPTO is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**Ivars C. Cintins**  
**Primary Examiner**  
**Art Unit 1724**

I. Cintins  
September 2, 2005